

UTAH DIVISION OF OIL, GAS AND MINING

REMARKS: WELL LOG _____ ELECTRIC LOGS _____ FILE ☒ WATER SANDS _____ LOCATION INSPECTED _____ SUB. REPORT/ABD. _____** LA well never drilled June 19, 1981*

DATE FILED 5-25-79

LAND: FEE & PATENTED

STATE LEASE NO.

PUBLIC LEASE NO.

INDIAN Ute Tribal

DRILLING APPROVED: 5-25-79

SPUDDED IN:

COMPLETED:

PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED:

*Location Abandoned June 19, 1981*FIELD: *Undes. 3/86 Altamont*

UNIT: Skitzzy Canyon

COUNTY: Duchesne

WELL NO. Skitzzy Canyon Ute 2-23-1A

API NO: 43-013-30490

LOCATION 1210' FT. FROM (N) ~~XX~~ LINE.

1187'

FT. FROM ~~XX~~ (W) LINE.

NW NW 4

1/4 - 1/4 SEC. 23

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
				4S	6W	23	GULF OIL CORPORATION

FIELD NOTATIONS

Entered in NID File
Location Map Pinned
Card Indexed
.....

Checked by Chief
Approval Letter
Disapproval Letter

COMPLETION DATA:

..... Completed
..... WW..... TA.....
GW..... OS..... PA.....

Location Inspected
Bond released
State or Fee Land .

LOGS FILED

Driller's Log.....
Electric Logs (No.)
E..... I..... Dual I Lat..... GR-M..... Micro.....
BHC Sonic GR..... Lat..... MI-L..... Sonic.....
CLog..... CLog..... Others.....

JhC
3-16-90

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

2. TYPE OF WELL
OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☐

3. NAME OF OPERATOR
Gulf Oil Corporation

4. ADDRESS OF OPERATOR c/o Environmental Engineering Company
1720 South Poplar, Suite 5, Casper, Wyoming 82601

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface

1,210' FNL & 1,187' FWL, Sec. 23-T4S-R6W., Uinta Mer.

At proposed prod. zone
Same

6. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
9.1 miles southwest of Duchesne, Utah

7. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any) 1,187'

8. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 3,500'

9. ELEVATIONS (Show whether DF, RT, GR, etc.)
6,696' GR.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-H62-1882

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Ute Tribe

7. UNIT AGREEMENT NAME

Spitz Canyon

8. FARM OR LEASE NAME

9. WELL NO.

23 Ute Tribal A1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T. R., M., OR BLK.
AND SURVEY OR AREA

NW1/4NW1/4 Sec. 23-T4S-R6W.,
Uinta Meridian

12. COUNTY OR PARISH 13. STATE

Duchesne Utah

16. NO. OF ACRES IN LEASE

640.00

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

19. PROPOSED DEPTH

6,500'

20. ROTARY OR CABLE TOOLS

Rotary

22. APPROX. DATE WORK WILL START*

November 1, 1978

23. All New PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
20 1/2"	16"	65# H-40	60'	75 sacks
12 1/4"	9 5/8"	36# K-55	1,000'	425 sacks
8 3/4"	7"	26# K-55	5,900'	500 sacks
6"	5"	18# N-80	6,500'-(5,800)	200 sacks

1. Drill 20 1/2" hole to 60' and set 16" surface pipe with 75 sacks.
2. Drill 12 1/4" hole to 1,000' and set 9 5/8" casing with 425 sacks.
3. Drill 8 3/4" hole to 5,900' and set 7" casing with 500 sacks.
4. Drill 6" hole to 6,500' and hang 5" liner from 5,800' to T.D. and cement to top.

Exhibits Attached

- A. Location and Elevation Plat
- B. Ten-point Compliance Program
- C. Blowout Preventer Diagram
- D. Multipoint Surface Use Plan
- E. Access Road Map
- F. Topographic Map
- G. Drill Pad layout w/Cut & Fill Contours

State of Utah, Department of Natural Resources
Division of Oil, Gas, and Mining
1538 West North Temple
Salt Lake City, Utah 84116

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

34. SIGNED R. B. Rossmann TITLE Area Drilling Sup't DATE October 13, 1978

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY T. P. Xgita TITLE ACTING DISTRICT ENGINEER DATE DEC 15 1978

CONDITIONS OF APPROVAL, IF ANY:
NOTICE OF APPROVAL
CONDITIONS OF APPROVAL ATTACHED
TO OPERATOR'S COPY

NECESSARY FLARING OF GAS DURING
DRILLING AND COMPLETION APPROVED
SUBJECT TO ROYALTY (NTL-4)

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

FROM: : DISTRICT GEOLOGIST, ME, SALT LAKE CITY, UTAH

TO : DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. 14-20-H62-1882

OPERATOR: Gulf Oil Corporation

WELL NO. 2-23 Ute Tribal A1

LOCATION: $\frac{1}{4}$ NW $\frac{1}{4}$ nw $\frac{1}{4}$ sec. 23, T. 4 S., R. 6 W., USM

Duchesne County, Utah

1. Stratigraphy: Operator projected tops appear reasonable

Surface- Uinta. formation
661- Green River Formation (possible oil and gas)
4,162- Douglas Creek
6,012- Wasatch (possible oil and gas)

2. Fresh Water: Fresh water could occur in the Green River Formation to a depth of 1500 feet.

3. Leasable Minerals: The area is underlain by oil shale. Oil shale should be encountered in the Green River Formation.

4. Additional Logs Needed: APD Logging program (FDC and gamma) should be run through the Green River Formation to enable identification of the oil-shale beds.

5. Potential Geologic Hazards: Some minor lost circulation zones could be encountered through the Green River Fm. No other geologic hazards are anticipated.

6. References and Remarks: One other well drilled by the operator in this section, but it has not yet been completed.

REF: USGS Files, Salt Lake City, Utah

Signature:

James E. Kelly

Date: 10-23-78

United States Department of the Interior
Geological Survey
8440 Federal Building
Salt Lake City, Utah 84138

Usual Environmental Analysis

Lease No. Ute (14-20-H62-1882)Operator Gulf Oil CorporationWell No. 2-23Location 1210' FNL; 1187' FWLSec. 23T. 4S.R. 6W.County DuchesneState UtahField WildcatStatus: Surface Ownership of Wildlife Resour. Minerals TribalJoint Field Inspection Date November 6, 1978

Participants and Organizations:

Jack SkewDirt ContractorLynn HallBureau of Indian AffairsDarryl CooperGulf Oil RepresentativeGene WilsonU.S. Geological Survey

Related Environmental Analyses and References:

(1)

(2)

→ Provide steps
for efficient
containment
@ drill site

Pad 185 x 400
Pit 100 x 200
0.5 mi new access
Upgrade 0.75 mi access
Flow line not used
Stockpile topsail
3.5 ac

Analysis Prepared by: Gene Wilson
Environmental Scientist
Salt Lake City, Utah

Reviewed by: George Diwachak
Environmental Scientist
Salt Lake City, Utah

Date November 6, 1978

Noted - G. Diwachak

Proposed Action:

On October 13, 1978, Gulf Oil Corporation filed an Application for Permit to Drill the No. 2-23 exploratory well, a 6500-ft. oil test of the Wasatch Formation; located at an elevation of 6696 ft. in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 23, T. 4S., R. 6W., on Tribal mineral lands and private surface; lease No. 14-20-H62-1882. There was no objection raised to the wellsite nor to the access road.

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Fresh-water sands and other mineral-bearing formations would be protected. A Blowout Preventor would be used during the drilling of the well. The proposed pressure rating should be adequate. Details of the operator's NTL-6 10-Point Subsurface and 13-Point Surface Protection Plans are on file in the U.S.G.S. District Office in Salt Lake City, Utah and the U.S.G.S. Northern Rocky Mountain Area Office in Casper, Wyoming.

→ A working agreement has been reached with the Utah Division of Wildlife Resources, the controlling surface owner-agency. Rehabilitation plans would be decided upon as the well neared completion; the Surface Management Agency would be consulted for technical expertise on those arrangements.

The operator proposes to construct a drill pad 185 ft. wide x 400 ft. long and a reserve pit 100 ft x 200 ft. A new access road would be constructed 18 ft. wide x 0.5 miles long and upgrade 18 ft. wide by 0.75 miles access road from an existing and improved road. The operator proposes to construct production facilities on the disturbed area of the proposed drill pad.

If production is established, plans for a gas flow line would be submitted to the appropriate agencies for approval. The anticipated starting date is upon approval and duration of drilling activities would be about 60 days.

Location and Natural Setting:

The proposed drill site is approximately 9.1 miles southwest of Duchesne, Utah, the nearest town. A fair road runs to within 1.25 miles of the location. This well is a wildcat.

Topography:

The area is very dissected with steep slopes. The selected site is located about 500 ft. above the floor of a short canyon that opens into Skitz Canyon. Skitz Canyon is very steep following the west boundary of Section 23.

Geology:

The surface geology is the Uintah Formation. The soil is sandy clay with small/large rock. No geologic hazards are known near the drillsite. Seismic risk for the area is minor. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan. The geologic markers for this site specific are: Green River @ 661', Douglas Creek @ 4162', Wasatch @ 6012'.

Approval of the proposed action would be conditioned that adequate and sufficient electric/radioactive/density logging surveys would be made to locate and identify any potential mineral resources. Production casing and cementing would be adjusted to assure no influence of the hydro-carbon zones through the well bore on these minerals. In the event the well is abandoned, cement plugs would be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss of circulation does exist and is possible in the Green River and Douglas Creek Formations. Loss of circulation may result in the lowering of the mud levels, which might permit exposed upper formations to blow out or to cause formation to slough and stick to drill pipe. A loss of circulation would result in contamination due to the introduction of drilling muds, mud chemicals, filler materials, and water deep in to the permeable zone, fissures, fractures, and caverns within the formation in which fluid loss is occurring. The use of special drilling techniques, drilling muds, and lost circulation materials may be effective in controlling lost circulation.

A geologic review of the proposed action has been furnished by the Area Geologist, U.S. Geological Survey, Salt Lake City, Utah.

The operator's drilling, cementing, casing and blowout prevention programs have been reviewed by the Geological Survey engineers and determined to be adequate.

Soils:

No detailed soil survey has been made of the project area. The top soils in the area are sandy clay typical of the Uintah Formation. The soil is subject to runoff from rainfall and has a high runoff potential and sediment production would be high. The soils are mildly to moderately alkaline and support the salt-desert shrub community. The pinon, juniper association is also present.

Top soil would be removed from the surface and stockpiled. The soil would be spread over the surface of disturbed area when abandoned to aid in rehabilitation of the surface. Rehabilitation is necessary to prevent erosion and encroachment of undesired species on the disturbed areas. The operator proposes to rehabilitate the location and access roads per the recommendations of the Bureau of Indian Affairs.

Approximately 3.5 acres of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, reseeding of slope-cut area would minimize this impact.

Air:

No specific data on air quality is available at the proposed location. There would be a minor increase in air pollution due to emissions from rig and support traffic engines. Particulate matter would increase due to dust from travel over unpaved dirt roads. The potential for increased air pollution due to leaks, spills, and fire would be possible.

Relatively heavy traffic would be anticipated during the drilling-operations phase, increasing dust levels and exhaust pollutants in the area. If the well was to be completed for production, traffic would be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced.

Toxic or noxious gases are not anticipated.

Precipitation:

Annual rainfall should range from about 9 to 16" at the proposed location. The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during early spring runoff and during extremely heavy rain storms. This type of storm is rather uncommon as the normal annual precipitation is around 9".

Winds are medium and gusty, occurring predominately from west-southwest to east-northeast. Air mass inversions are rare. The climate is semi-arid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

The primary drainage from the site area is Skitzzy Canyon. The Skitzzy Canyon drains into the Strawberry River (Starvation Reservoir).

Some additional erosion would be expected in the area since surface vegetation would be removed. If erosion became serious, drainage systems such as water bars and dikes would be installed to minimize the problem. The proposed project should have minor impact on the surface water systems. The potentials for pollution would be present from leaks or spills. The operator is required to report and clean-up all spills or leaks.

Ground Water Hydrology:

Some minor pollution of ground water systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination and comingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basic information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B. The depths of fresh water formations are listed in the 10-Point Subsurface Protection Plan. There would be no tangible effect on water migration in fresh water aquifers. The pits would be unlined. If fresh water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

Vegetation:

The vegetation at the location consists of buck brush, (Mountain Mahogany), Mormon tea, cactus, pinon Pine, Juniper, and grasses (sparse).

Plants in the area are of the pinon-juniper association.

Proposed action would remove about 3.5 acres of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

The operator proposes to rehabilitate the surface upon completion of operations.

Wildlife:

Animal and plant inventory has been made. No endangered plants or animals are known to habitat on the project area. The fauna of the area consists predominantly of mule deer, coyotes, rabbits, foxes, and varieties of small ground squirrels and other types of rodents and various types of reptiles. The area is used by man for the primary purpose of recreation. The birds of the area are raptors, finches, ground sparrow, magpies, crows, and jays.

Social-Economic Effect:

An on the ground surface archaeological reconnaissance would be required prior to approval of the proposed action. Appropriate clearances would then be obtained from the surface managing agency. If a historic artifact, an archaeological feature or site is discovered during construct-

ion operations; activity would cease until the extent, the scientific importance, and the method of mitigating the adverse effects could be determined by a qualified cultural resource specialist.

There are no occupied dwellings or other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project and is judged to be minor. All permanent facilities placed on the location would be painted a color to blend in with the natural environment. Present use of the area is grazing, recreation, and oil and gas activities.

Noise from the drilling operation may temporarily disturb wildlife and people in the area. Noise levels would be moderately high during drilling and completion operations. Upon completion, noise levels would be infrequent and significantly less. If the area is abandoned, noise levels should return to pre-drilling levels.

The site is not visible from any major roads. After drilling operations, completion equipment will not be visible to passersby of the area and should not present a major intrusion.

The overall effect of oil and gas drilling and production activity are significant in Duchesne, Utah.

But should this well discover a significant new hydrocarbon source, local, state, and possible national economics might be improved. In this instance, other development wells would be anticipated, with substantially greater environmental and economic impacts.

Should the wellsite be abandoned, surface rehabilitation would be done according to the surface agency's requirements and to USGS's satisfaction. This would involve leveling, contouring, reseeding, etc., of the location and possibly the access road. If the well should produce hydrocarbons, measures would be undertaken to protect wildlife and domestic stock from the production equipment.

There are no national, state, or local parks, forests, wildlife refuges or ranges, grasslands, monuments, trails or other formally designated recreational facilities near the proposed location. The surface agency (Utah Division of Wildlife Resources) has not offered any objection to the proposed activity.

Waste Disposal:

The mud and reserves pits would contain all fluids used during the drilling operations. A trash pit would be utilized for any solid wastes generated at the site and would be buried at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

Alternative to the Proposed Action:1) Not Approving the Proposed Permit--The Oil and Gas Lease Grants The Lessee Exclusive Right To Drill For, Mine, Extract, Remove and Dispose Of All Oil and Gas Deposits.

Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and subsurface would be prevented as much as possible under U.S.G.S. and other controlling agencies supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of (oil and gas) should be taken into consideration. Therefore, the alternative of not proceeding with the proposed action at this time is rejected.

2) Minor relocation of the wellsite and access road or any special, restrictive stipulations or modifications to the proposed program would not significantly reduce the environmental impact. There are no severe vegetative, animal, or archaeological-historical-cultural conflicts at the site. Since only a minor impact on the environment would be expected, the alternative of moving the location is rejected. At abandonment, normal rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan.

Adverse Environmental Effects Which Cannot be Avoided:

Surface disturbance and removal of vegetation from approximately 3.5 acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular associated with the operation. If the well is a gas producer, additional surface disturbance would be required to install production pipelines. The potential for fires, leaks, spills of gas, oil or water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for sub-surface damage to fresh water aquifers and other geologic formations exists. Minor distractions from aesthetics during the lifetime of the project would exist. If the well is a producer, an irreplaceable and irretrievable commitment of resources would be made. Erosion from the site could eventually be carried as sediment in the Starvation Reservoir.

→ The potential is high for pollution to Skitz Canyon eventually finding its way to the Starvation Reservoir. Operations should be monitored for leaks and spills and also poor drilling practices.

Determination:

This requested action ~~does~~/does not constitute a major Federal action significantly affecting the environment in the sense of NEPA, Sec. 102(2)(C).

Date

12/4/78



District Engineer
U.S. Geological Survey
Conservation Division
Oil and Gas Operations
Salt Lake City District

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐OTHER ☐SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Gulf Oil Corporation

3. ADDRESS OF OPERATOR

P.O. Box 2619, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

1210' FNL & 1187' FWL Sec. 23-T4S-R6W, Unita Meridian

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

8 miles southwest of Duchesne, Utah

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

1187'

16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1187'

19. PROPOSED DEPTH

5800

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

GR 6696'

22. APPROX. DATE WORK WILL START*

July 15, 1979

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8	48 H40	61	75 sacks
12-1/4	9-5/8	36 K55	1000	425 sacks
8-3/4	7	26 K55	5800	550 sacks

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

JRM Matthews

TITLE Area Drilling Supt.

DATE May 16, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

WT Martin

TITLE

ACTING DISTRICT ENGINEER

DATE

AUG 09 1979

CONDITIONS OF APPROVAL, IF ANY:

NOTICE OF APPROVAL

*See Instructions On Reverse Side

NECESSARY FLARING OF GAS DURING
DRILLING AND COMPLETION APPROVED
SUBJECT TO ROYALTY (NTL-4)

State O & G

FROM: DISTRICT GEOLOGIST ME, SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. 14-20-H62-1882

OPERATOR: GULF OIL CORP

WELL NO. 2-23-1A

LOCATION: $\frac{1}{2}$ NW $\frac{1}{2}$ NW $\frac{1}{2}$ sec. 23, T. 4S, R. 6W, USM

DUCHESNE County, UTAH

1. Stratigraphy: Operator's projected tops seem reasonable:

Surface - Uinta (water)

200' - Green River (water, oil & oil shale)

4700' - Douglas Creek (oil shale)

5900' - Wasatch (possibly oil & gas)

5900' - T.D.

2. Fresh Water:

Usable water may be encountered in the Uinta & Green River Fms.

3. Leasable Minerals:

The area is underlain by oil shale which should be encountered in the Green River fm about 4500 to 5500'.

4. Additional Logs Needed: Dual induction laterolog, SP, gr & formation density - compensated neutron logs should be run through the Green River fm to identify oil shale beds

5. Potential Geologic Hazards:

none anticipated by the operator.

6. References and Remarks:

none

Signature:

lmb

Date:

6-6-79

Oil and Gas Drilling

EA #350-79

United States Department of the Interior
Geological Survey
8440 Federal Building
Salt Lake City, Utah 84138

Unusual Environmental Analysis

Lease No.: TL-1882

Operator: Gulf Oil Corp

Well No.: 2-23-1A

Location: 1210' FNL & 1187' FWL Sec.: 23 T.: 4S R.: 6W

County: Duchesne State: Utah Field: Undesignated

Status: Surface Ownership: Indian Minerals: Tribal

Joint Field Inspection Date: 6-19-79

Participants and Organizations:

Craig Hansen	U.S.G.S. Vernal
Roman Geissel	U.S.G.S. Vernal
Mark Christensen	U.S.G.S. Vernal
Dale Hanberg	BIA Ft. Duchesne
Emmit Booher	Gulf Oil
Jack Skews	Skews & Hamilton Const.

Analysis Prepared by: Craig Hansen
Environmental Scientist
Vernal, Utah

Date: 6-21-79

*Per 105 x 400
Pit 100 x 200
8/10 mi 16' geocis road
4/10 mi 18' ✓ upgrader
600 ft low line not under
5 mi 16' 3 1/2 sec
→ Pit 100 x 200
3) A-11*

Proposed Action:

On May 21, Gulf Oil Corporation filed an Application for Permit to Drill the No. 2-23-1A development well, a 5800 foot oil test of the Wasatch Formation; located at an elevation of 6,606' ft. in the NW/4 NW/4 Section 23-4S-6W on Tribal mineral lands and Indian surface; lease No. T1 1882. There was no objection to the wellsite nor to the access road.

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Fresh-water sands and other mineral-bearing formations would be protected. A Blowout Preventor would be used during the drilling of the well. The proposed pressure rating should be adequate. Details of the operator's NTL-6 10-Point Subsurface Plan are on file in the U.S.G.S. District Office in Salt Lake City, Utah and the U.S.G.S. Northern Rocky Mountain Area Office in Casper, Wyoming. The 13-Point Surface Protection Plan is on file in the District Office in Salt Lake City.

A working agreement has been reached with the Bureau of Indian Affairs, the controlling surface agency. Rehabilitation plans would be decided upon as well neared completion; the Surface Management Agency would be consulted for technical expertise on those arrangements.

The operator proposes to construct a drill pad 185' ft. wide x 400 ft. long and reserve a pit 100 ft. x 200 ft. A new access road would be constructed 18 ft. wide x 0.8 miles long and an existing road would be upgraded to 18 ft. wide by 0.9 miles long from a maintained road. The operator proposes to construct production facilities on disturbed area of the proposed drill pad. If production is established, plans for a gas flow line would be submitted to the appropriate agencies for approval. The anticipated starting date is 7-15-79 and duration of drilling activities would be about 60 days.

Location and Natural Setting:

The proposed drillsite is approximately 8 miles Southwest of Duchesne Utah the nearest town. A poor road runs to within 0.8 miles of the location. This well a Undersignated field.

Topography:

The location is on top of a flat ridge trending to the west with steep canyons to the north, south and west of the location.

Geology:

The surface geology is Uinta Formation.

The soil is weathered shale with sandy to sandy clay mixed with shale are present on the location.

No geologic hazards are known near the drillsite.

Seismic^c risk for the area is minor. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan

Approval of the proposed action would be conditioned that adequate and sufficient electric and density logging surveys would be made to locate and identify any potential mineral resources. Production casing and cementing would be adjusted to assure no influence of the hydrocarbon zones through the well bore on these minerals. In the event the well is abandoned, cement plugs would be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss of circulation would exist. Loss of circulation may result in the lowering of the mud levels, which might permit exposed upper formations to blow out or to cause formations to slough and stick to drill pipe. A loss of circulation would result in contamination due to the introduction of drilling muds, mud chemicals, filler materials, and water deep in to the permeable zone, fissures, fractures, and caverns within the formation in which fluid loss is occurring. The use of special drilling techniques, drilling muds, and lost circulation materials may be effective in controlling lost circulation.

A geologic review of the proposed action has been furnished by the Area Geologist, U. S. Geological Survey, Salt Lake City, Utah.

The operator's drilling, cementing, casing and blowout prevention programs have been reviewed by the Geological Survey Engineers and determined to be adequate.

Soils:

No detailed soil survey has been made of the project area. The top soils in the area range from a sandy clay to a clay soil. The soil is subject to runoff from rainfall and has a high runoff potential and sediment production would be high. The soils are mildly to moderately alkaline and support the salt-desert shrub community. The pinon-juniper association is also present.

Top soil would be removed from the surface and stockpiled. The soil would be spread over the surface of disturbed areas when abandoned to aid in rehabilitation of the surface. Rehabilitation is necessary to prevent erosion and encroachment of undesired species on the disturbed areas. The operator proposes to rehabilitate the location and access road per the recommendations of the Bureau of Indian Affairs.

Approximately 3.9 acres of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, reseeding of slope-cut area would minimize this impact.

Air:

No specific data on air quality is available at the proposed location. There would be a minor increase in air pollution due to emissions from rig and support traffic engines. Particulate matter would increase due to dust from travel over unpaved dirt roads. The potential for increased air pollution due to leaks, spills, and fire would be possible.

Relatively heavy traffic would be anticipated during the drilling-operations phase, increasing dust levels and exhaust pollutants in the area. If the well was to be completed for production, traffic would be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced.

Toxic or noxious gases would not be anticipated.

Precipitation:

Annual rain fall should range from about 8" to 11" at the proposed location. The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during early spring runoff and during extremely heavy rain storms. This type of storm is rather uncommon as the normal annual precipitation is around 8".

Winds are medium and gusty, occurring predominately from West to East. Air mass inversions are rare. The climate is semi-arid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

The location drains steeply to Skitzy Canyon a non perennial drainage, which flows intermittently to the Strawberry River.

The Strawberry River is the only perennial drainage that could be affected by the location.

Some additional erosion would be expected in the area since surface vegetation would be removed. If erosion became serious, drainage systems such as water bars and dikes would be installed to minimize the problem. The proposed project should have minor impact on the surface water systems. The potentials for pollution would be present from leaks and spills. The operator is required to report and clean-up all spills or leaks.

Ground Water Hydrology:

Some minor pollution of ground water systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination and comingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basis information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B. The depths of fresh water formations are listed in the 10-Point Subsurface Protection Plan. The pits would be lined. If fresh water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

Vegetation:

Sagebrush, rabbitbrush, needle grass, bunch grass, mormon tea, pinon and juniper exist on the location.

Plants in the area are of the salt-desert-shrub types grading to the pinon-juniper association.

Proposed action would remove about 3.9 acres of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

The operator proposes to rehabilitate the surface upon completion of operations.

Wildlife:

The fauna of the area consists predominately of mule deer, coyotes, rabbits, foxes, and varieties of small ground squirrels and other types of rodents and various types or reptiles. The area is used by man for the primary purpose of grazing domestic livestock and sheep. The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

No endangered^d plants or animals are known to inhabit the project area.

Social-Economic Effect:

An on the ground surface archaeological reconnaissance would be required prior to approval of the proposed action. Appropriate clearances would then be obtained from the surface managing agency. If a historic artifact, an archaeological feature or site is discovered during construction operations; activity would cease until the extent, the scientific importance, and the method of mitigation the adverse effects could be determined by a qualified cultural resource specialist.

There are no occupied dwellings or other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project and is judged to be minor. All permanent facilities placed on the location would be painted a color to blend in with the natural environment. Present use of the area is grazing, recreation, and oil and gas activities.

Noise from the drilling operations may temporarily disturb wildlife and people in the area. Noise levels would be moderately high during drilling and completion operations. Upon completion, noise levels would be infrequent and significantly less. If the area is abandoned, noise levels should return to pre-drilling levels.

After drilling operations, completion equipment would be visible to passersby of the area but would not present a major intrusion.

The economic effect of one well would be difficult to determine. The overall effect of oil and gas drilling and production activity are significant in Duchesne County.

But should this well discover a significant new hydrocarbon source, local, state and possibly national economics might be improved. In this instance, other development wells would be anticipated, with substantially greater environmental and economic impacts.

Should the wellsite be abandoned, surface rehabilitation would be done according to the surface agency's requirements and to USGS's satisfaction. This would involve leveling, contouring, reseeding, etc., of the location and possibly the access road. If the well should produce hydrocarbons, measures would be undertaken to protect wildlife and domestic stock from the production equipment.

There are no national, state, or local parks, forests, wildlife refuges or ranges, grasslands, monuments, trails or other formally designated recreational facilities near the proposed location.

Waste Disposal:


The mud and reserve pits would contain all fluids used during the drilling operations. A trash pit would be utilized for any solid wastes generated at the site and would be buried at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

Alternative to the Proposed Action:

1). Not approving the proposed permit -- the oil and gas lease grants the lessee exclusive right to drill for, mine, extract, remove and dispose of all oil and gas deposits.

Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and subsurface would be prevented as much as possible under U.S.G.S. and other controlling agencies supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of oil and gas should be taken into consideration. Therefore, the alternative of not proceeding with the proposed action at this time is rejected.

2). Minor relocation of the wellsite and access road or any special, restrictive stipulations or modifications to the proposed program would not significantly reduce the environmental impact. There are no severe vegetation, animal or archaeological-historical-cultural conflicts at the site. Since only a minor impact on the environment would be expected, the alternative of moving the location is rejected. At abandonment, normal rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan.

3). Drilling should be allowed provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator. 

A. Reserve pits should be lined with heavy plastic to insure pit integrity.

B. Trees would be cut and piled before construction begins.

Adverse Environmental Effects Which Cannot Be Avoided:

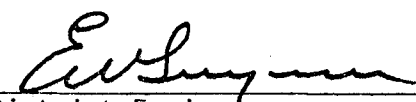
Surface disturbance and removal of vegetation from approximately 3.9 acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife and livestock. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated with the operation. If the well is a gas producer, additional surface disturbance would be required to install production pipelines. The potential for fires, gas leaks, and spills of oil and water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for sub-surface damage to fresh water aquifers and other geologic formations exists. Minor distractions from aesthetics during the lifetime of the project would exist. If the well is a producer, an irreplaceable commitment of resources would be made. Erosion from the site would eventually be carried as sediment in the Strawberry River. The potential for pollution to the Skitzy Canyon would exist through leaks and spills.

Determination:

This requested action ~~does~~/does not constitute a major Federal action significantly affecting the environment in the sense of NEPA, 102 (2) (C).

Date

7/13/79


District Engineer
U. S. Geological Survey
Conservation Division
Oil and Gas Operations
Salt Lake City District

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Gulf Oil Corporation

3. ADDRESS OF OPERATOR

P.O. Box 2619, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)

At surface

1210' FNL & 1187' FWL Sec. 23-T4S-R6W, Unita Meridian

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

8 miles southwest of Duchesne, Utah

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

1187'

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1187'

16. NO. OF ACRES IN LEASE

640

19. PROPOSED DEPTH

5800

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

GR 6696'

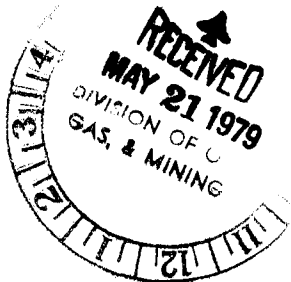
22. APPROX. DATE WORK WILL START*

July 15, 1979

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8	48 H40	61	75 sacks
12-1/4	9-5/8	36 K55	1000	425 sacks
8-3/4	7	26 K55	5800	550 sacks

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING

DATE: 5-24-79

BY: *M. J. Mendenhall*

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

J. M. Matthews

TITLE Area Drilling Supt.

DATE May 16, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

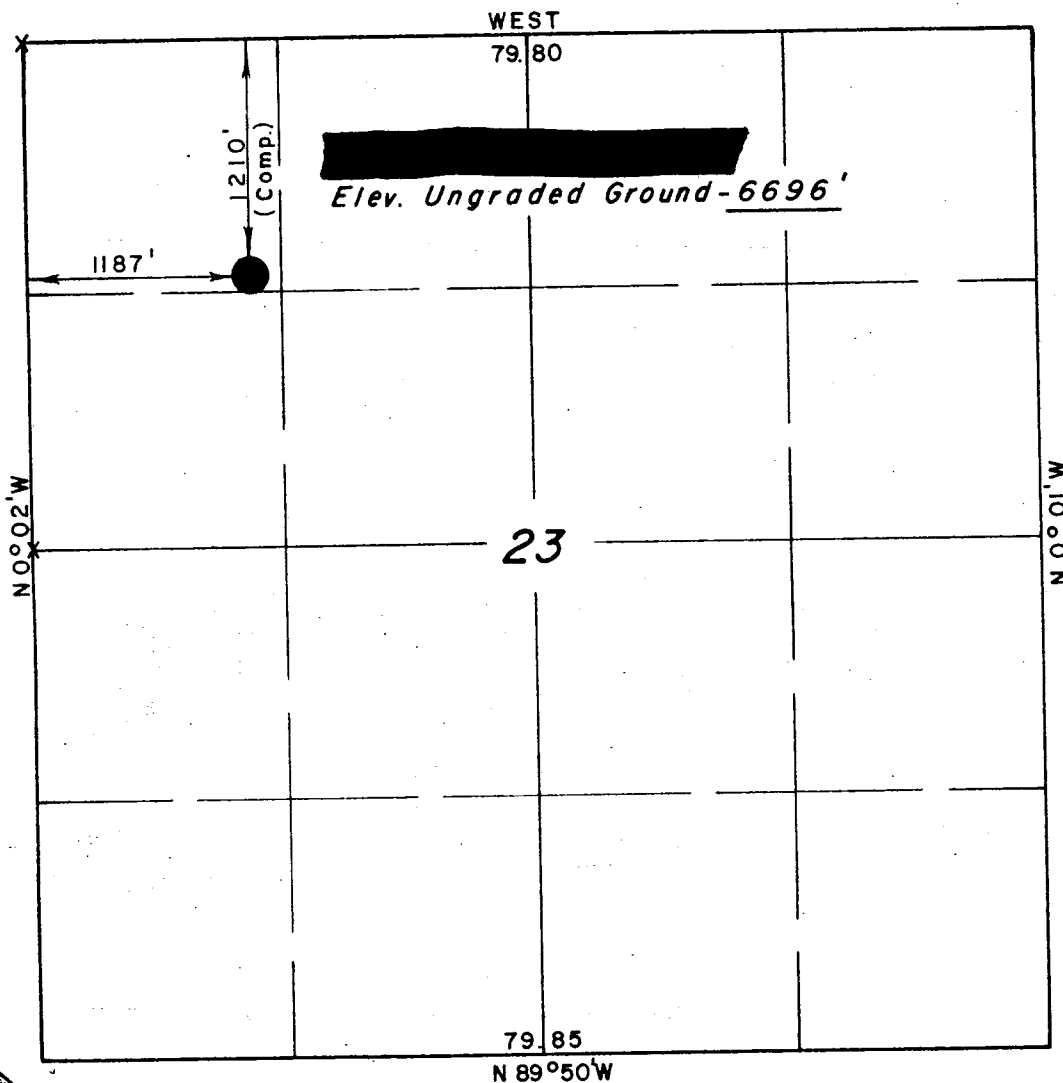
*See Instructions On Reverse Side

T4S, R6W, U.S.B. & M.

PROJECT

GULF OIL CORP.

Well location, [REDACTED]
[REDACTED], located as shown in the
NW 1/4 NW 1/4 Section 23, T4S, R6W,
U.S.B. & M. Duchesne County, Utah.



Skitz Canyon Ute #2-23-1A



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIEF

[Signature]
REGISTERED LAND SURVEYOR
REGISTRATION NO 3154
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P.O. BOX Q - 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 9 / 26 / 78
PARTY RK TJ RP	REFERENCES () Plat
WEATHER CLEAR / COOL	FILE GULF OIL CORP.

= Section Corners Located

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: May 21, 1979

Operator: Gulf Oil Corporation

Well No: Skitz Canyon Ute 2-23-1A

Location: Sec. 23 T. 4S R. 6W County: Duchesne

File Prepared: ☐

Entered on N.I.D.: ☒

Card Indexed: ☒

Completion Sheet: ☒

API Number: 43-113-30490

CHECKED BY:

Administrative Assistant: _____

Remarks:

Petroleum Engineer: M. J. Minder 5-24-79

Remarks:

Director: 7

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required: ☐

Survey Plat Required: ☐

Order No. _____

Surface Casing Change ☐
to _____

Rule C-3(c), Topographic exception/company owns or controls acreage
within a 660' radius of proposed site ☐

O.K. Rule C-3 ☐

O.K. In Skitz Canyon Ute Unit

Other:

☐ Letter Written/Approved Unit

TA 1-3-B2



SCOTT M. MATHESON
Governor

OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

CHARLES R. HENDERSON
Chairman

JOHN L. BELL
C. RAY JUVELIN
THADIS W. BOX
CONSTANCE K. LUNDBERG
EDWARD T. BECK
E. STEELE MCINTYRE

March 11, 1980

Gulf Oil
P.O. Box 2619
Casper, Wyoming 82602

Re: See attached sheet for wells

Gentlemen:

In reference to above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If we do not hear from your company within thirty (30) days, we will assume you do not intend to drill these wells, and we will terminate the applications.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

JANICE TABISH
CLERK TYPIST

- (1) Well No. Skitzzy Canyon Ute 2-22-2C
Sec. 22, T. 4S, R. 6W.
Duchesne County, Utah
- (2) Well No. Skitzzy Canyon Ute 3-22-1C
Sec. 22, T. 4S, R. 6W.
Duchesne County, Utah
- (3) Well No. Skitzzy Canyon Ute 4-22-1A
Sec. 22, T. 4S, R. 6W.
Duchesne County, Utah
- (4) Well No. Skitzzy Canyon Ute 2-23-1A
Sec. 23, T. 4S, R. 6W
Duchesne County, Utah
- (5) Well No. Skitzzy Canyon Ute 4-26-3A
Sec. 26, T. 4S, R. 6W.
Duchesne County, Utah

SCOTT M. MATHESON
Governor



OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES

CHARLES R. HENDERSON
Chairman

CLEON B. FEIGHT
Director

DIVISION OF OIL, GAS, AND MINING

1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771
April 9, 1980

JOHN L. BELL
C. RAY JUVELIN
THADIS W. BOX
CONSTANCE K. LUNDBERG
EDWARD T. BECK
E. STEELE MCINTYRE

Gulf Oil
P.O. Box 2619
Casper, Wyoming 82602

Re: See attached sheet for wells.

Gentlemen:

In reference to above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill these wells, please notify this Division. If spudding or any other activity has taken place, please send necessary forms. If we do not hear from your company within fifteen (15) days, we will assume you do not intend to drill these wells and action will be taken to terminate the application. If you plan on drilling these locations at a later date, please notify as such.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
DIRECTOR

- (1) Well No. Skitzzy Canyon Ute 2-22-2C
Sec. 22, T. 4S, R. 6W.
Duchesne County, Utah
- (2) Well No. Skitzzy Canyon Ute 2-23-1A
Sec. 23, T. 4S, R. 6W.
Duchesne County, Utah
- (3) Well No. Skitzzy Canyon Ute 3-22-1C
Sec. 22, T. 4S, R. 6W.
Duchesne County, Utah
- (4) Well No. Skitzzy Canyon Ute 4-22-1A
Sec. 22, T. 4S, R. 6W.
Duchesne County, Utah
- (5) Well No. Skitzzy Canyon Ute 4-26-3A
Sec. 26, T. 4S, R. 6W.
Duchesne County, Utah
- (6) Well No. Wontis Valley Unit St. Fed. #118
Sec. 13, T. 8S, R. 21E.
Uintah County, Utah

June 19, 1981

Gulf Oil Corporation
P. O. Box 2619
Casper, Wyoming 82602

Re: Well No. Skitzzy Canyon Ute 2-23-1A
Sec. 23, T. 4S, R. 6W
Duchesne County, Utah

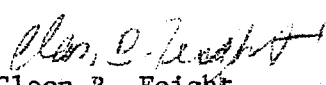
Gentlemen:

Approval to drill the above mentioned well, which was granted in our letter of August 13, 1979, is hereby terminated for failure to spud it within a reasonable period of time.

If and when you should decide to drill this well, it will be necessary for you to again obtain the approval of this Division.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING


Cleon B. Feight
Director

/lm